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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,175	11/29/2000	Robert Richardson	31590-168125 RK	8591

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EXAMINER

RIOS CUEVAS, ROBERTO JOSE

ART UNIT PAPER NUMBER

2836

DATE MAILED: 12/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,175

Applicant(s)

RICHARDSON, ROBERT

Examiner

Roberto J Rios

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 6. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the limitation "and/or" renders the claim indefinite failing to clearly set forth the metes and bounds of the claimed invention.

As per claim 5, the limitation "**some** tens" renders the claim indefinite failing to clearly set forth the metes and bounds of the claimed invention.

3. The following art rejection will be made as best understood by the Examiner in light of the above 35 USC 112 rejections.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Dassonville (US patent 4,370,607).

As per claim 1, Dassonville teaches a switching arrangement comprising a plurality of modules (Figure 4), to each of which energy or trigger signals are to be

applied, each module carrying two current transformer secondary windings and there being a primary transformer loop in the form of a transmission line (LP1) which is common to each module and which couples with the two transformer windings of each module (Figure 4).

As per claim 2, Dassonville teaches the primary transformer loop comprising a coaxial line (Figure 4).

As per claim 3, Dassonville teaches the two secondary windings on a module being an equal number of opposite turns connected in parallel (Figures 2, 4).

As per claim 4, Dassonville teaches each module associated with a solid-state switch to which trigger signals are applied via the transmission line (Figure 4).

As per claim 5, Dassonville teaches providing n modules to provide an output voltage of n kV (col. 2, line 31).

As per claim 6, Dassonville teaches the transmission line including a load resistor (Figure 2).

As per claim 9, Dassonville teaches means for transmitting current from one source (Vc) along said transmission line and from another source to apply triggering pulses (SC) to said modules (Figure 2).

As per claim 10, Dassonville teaches the current applied from one source being in an opposite direction from the other source (Figure 2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dassonville.

As per claims 7 and 8, Dassonville teaches the load resistor but does not specifically disclose the load resistor comprising a parallel diode and being located at the middle of the transmission line. However, the Examiner takes official notice that it is well known in the art to use resistive means as a line impedance matching means and to place the resistor at the middle of the line would be a design choice to improve line impedance matching. Moreover, parallel diodes are well known in the art for providing isolating means between power/current sources.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to place the resistor at the middle of the transmission line to improve line impedance matching.

8. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dassonville in view of Ashley (US patent 5,070,441).

As per claim 11, Dassonville teaches providing insulation to said transmission line (col. 2, line 46) but does not specifically disclose the insulation being electrostatic shielding. However, Ashley teaches a transmission line comprising an electrostatic shielding (col. 2, line 38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Dassonville with the teachings of Ashley

such that the transmission line comprises an electrostatic shielding for the purpose of shielding the transmission line against electrostatic forces.

As per claim 12, the Examiner takes official notice that it is well known in the art to interrupt transmission line insulation in order to interconnect any component such as a load resistor. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to break the shielding at the middle of the transmission line to interconnect a load resistor.

As per claim 13, Dassonville teaches providing a resistive load (R3) connected to the line insulation.

9. Art of general nature relating to transformer and switching arrangement has been cited for applicant's review.

Communication with PTO

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rios whose telephone number is (703) 306-5518. In the event that Examiner Rios cannot be reached, his supervisor, Brian Sircus may be contacted at (703) 308-3119. The fax number for Before-Final communications is (703) 872-9318, for After-Final communications is (703) 872-9319, and for Customer Service is (703) 872-9317.

Roberto J. Rios
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